

# Intervention #1

## Transition risk-adjusted valuation

### Intervention point

**Transition risks are not sufficiently incorporated into property valuations to enable owners and managers to address the retrofit challenge. By standardising the treatment and disclosure of transition risks, the real estate industry can account for the true costs of decarbonisation, enabling investment into retrofit and the development of sustainable assets.**

### Current situation

The global built environment ecosystem, like most other parts of our economies and societies, is in the process of embarking on a transition journey towards net zero. This will entail serious change in how we think about the value of our current and future buildings.

Buildings are responsible for 37 percent of global CO<sub>2</sub>e emissions with 10 percent embodied emissions from construction, materials and maintenance and 27 percent from lifetime operational emissions.<sup>1</sup> With 80 percent of the 2050 building stock already existing today, Europe is in desperate need of retrofitting at scale to support energy efficiency renovation. This is in order to reach the EU's Paris-aligned 1.5°C goals, which are 55 percent greenhouse gas (GHG) reduction by 2030 from a 1990 reference year and net zero by 2050.<sup>2</sup> Currently, around 75 percent of EU building stock is considered energy inefficient and less than 1 percent per year is undergoing a retrofit.<sup>3</sup>

Tackling the retrofit challenge has increasingly become a priority on the agenda of the European Commission, as demonstrated at a regional level with the [Renovation Wave for Europe](#), but also the individual member countries. For example, a minimum Energy Performance Certificate (EPC) standard for office buildings came into force in the Netherlands in January 2023.<sup>4</sup>

This is an upward trend, with policies across Europe becoming increasingly more ambitious. The most important current example is the recently revised Energy Performance of Buildings Directive (EPBD)<sup>5</sup>, which is expected to have significant long term energy efficiency-related implications for the buildings system due to the EU-wide introduction of minimum energy performance standards (MEPS). Another example is the UK's introduction of minimum energy efficiency standards<sup>6</sup> (MEES). With more stringent climate-related requirements expected, knock-on effects on asset valuations are likely to follow.

At the same time, wider pressures are spurring nearer-term action. For example, science-based private sector pledges to undertake a net zero transition are increasing,<sup>7</sup> which is increasing tenant demand for net zero properties to bring corporate emissions in line with their reduction pathways.<sup>8</sup>

However, despite the increase in government intervention, there is no regulation that ensures owners and managers achieve net zero within the necessary timeframe. Instead, different parts of the industry including investors, managers and tenants are driving change. This lack of regulation is hindering effective change as it results in valuers being unable to include the costs of decarbonising buildings in valuations.

Investors are paying greater attention to the sustainability of their assets thanks to the EU Taxonomy, and the Sustainable Finance Disclosure Regulation (SFRD), and the recent energy and cost of living crises have created wide awareness of the need to make buildings more efficient, and to seek cheaper sources of energy for occupiers and residents.

At the level of individual assets, retrofitting towards a net zero target (see *C Change Intervention #7 Net zero targets for the buildings system*) means energy efficiency improvements. Examples of these include better structural insulation and windows, fuel switching towards electrical heating systems and away from fossil heat sources such as oil and gas, on-site production of renewable energy, and other building performance improvements. Depending on the asset and the sector within real estate (such as commercial, industrial, retail, residential), renovation investment costs can be high, and not necessarily accounted for in an asset's capex forecast.

Oxford Economics estimates the office renovation cost in a number of European countries in 2021 is between 10 and 25 percent of capital value,<sup>9</sup> with costs expected to rise due to tight labour markets and expected demand increases for such construction projects. Deep retrofit cost estimates for an average UK house are 40,000 GBP, but for different asset classes the cost of an ambitious project can be "huge".<sup>10</sup>

With the changing policy environment, the growing private sector net zero pledges and the increasingly demanding sustainable finance criteria (e.g. through the EU Taxonomy), it is clear that real estate assets will soon become the subject of public and private transition policies, making deep energy retrofits a necessity.

As investment costs of such retrofits can be relatively high, and are generally not accounted for in the financial planning of an asset's holding period, there is currently a serious risk of a premature devaluation of an asset, with missing capital and business case for making the mitigating retrofit investment. In very inefficient and fossil-based assets, for example, corporate tenants may need to terminate their leases due to their own pledges, or the assets may soon no longer be allowed to be operated and rented

out. In other words, the asset could "strand". More precisely, a stranded asset is one that has prematurely lost its value, often immediately, due to certain factors such as regulatory changes or changes in private sector and capital demands. In this context, it is directly related to emissions.

The risks an asset is exposed due to the threat of stranding are called "transition risks". Transition risks are climate-related business risks which emerge from societal and economic shifts as we transition to a low-carbon future. They can include regulatory, technological, market, reputational and legal risks.

Transition risks apply to many sectors of the economy, but within the real estate sector, the ULI C Change programme has identified specific risk areas which directly relate to the real estate sector. This includes the cost of decarbonisation, energy costs, carbon price, obsolescence and depreciation, tenant voids, minimum energy performance standards, embodied carbon and exit yield.<sup>11</sup>

In addition, there are risks which are not yet transferable into financial materiality, such as reputational risk, insurance, internal resourcing and access to debt capital. While these are not yet possible to integrate into a discounted cash flow, the industry should nonetheless be mindful of, and planning for, eventually factoring these risks in, as they become more quantifiable.

The complete integration of transition risks into real estate valuations or cash flow models is still very rare. There are a number of reasons for this:<sup>12</sup>

- There is a significant knowledge gap of this specific risk landscape at large, but also a lack of knowledge of ways of transferring these risks into financial materiality, meaning how to account for expected future policy changes, customer net zero demands or unknown cost inflation of construction and materials.
- The available solutions for net zero retrofits across different asset classes and regions are unclear – also from an embodied carbon perspective<sup>13</sup> – which makes it very difficult to estimate the cost of decarbonisation at scale as a necessary factor in the transition risk mitigation estimates.

- Financial integration of transition risks into a real estate portfolio likely reduces its value, as awareness for the necessary and potentially high investment costs rises, and those have not been included in initial capex forecasts. This is an obvious disincentive for real estate portfolio managers to do so.

The above barriers to integration of transition risks and decarbonisation investment cost have meant that the valuation industry has not been able to adjust their practices towards the paradigm of a net zero transition, as the valuation process relies solely on evidence of market transactions<sup>14</sup>. Without a common methodology to assess or isolate transition risks from other elements impacting value, investors are not able to supply valuers with transition risk-adjusted comparables, and, consequently, valuers are not able to supply transition risk-adjusted valuations. This has created the dynamic of a “value deadlock”, which is explained in more detail in the 2022 ULI C Change report *Breaking the value deadlock: enabling action on decarbonisation*.<sup>15</sup>

Left without mitigation efforts, the consequences of such a value deadlock can lead to what has been termed a “carbon bubble”,<sup>16,17</sup> meaning that once government policies or capital and tenant demands become palpable in the market, the high investment cost to decarbonise each asset will lead to a significant devaluation of real estate portfolios. The consequences are expected to be felt through urban degradation of sub-prime locations, and indeed throughout the whole economy, considering the immense amounts of savings stored in, for example, pension funds invested in real estate.

At present, the real estate investment industry is responding to these challenges in many disparate ways. It is therefore paramount that transition risks are similarly accounted for as soon as possible by real estate owners and managers, and that these ways of accounting are disclosed to the valuation industry, so that the knowledge gap can be closed. This will enable transition risk mitigation strategies to be developed, which will inevitably consist of an acceleration of the rate of retrofit across all real estate asset classes.

## What is being done

ULI C Change has been at the forefront of addressing transition risk-adjusted valuation. Throughout the second half of 2022 and beginning of 2023, ULI conducted a multi stakeholder consultation to identify the key transition risks the industry will be facing. This consultation has led to the development and publication of the [Transition Risk Assessment Guidelines for Consultation](#), which supports owners and managers to assess and disclose transition risks as part of property valuations. The final version is expected to be published in June 2023.

In addition, the Royal Institution of Chartered Surveyors (RICS) European Leaders Forum has also started a process of leadership roundtables and discussions on the topic of including ESG criteria and thus, by proxy, transition risks into its valuation criteria. While this is currently only at the beginning, RICS has already hosted a number of leadership roundtables, and is planning to publish a first “information paper” on valuation and ESG in a European and EU context.

## Possible next steps

ULI C Change will be releasing its guidelines of how to assess and disclose transition risks at the ULI Europe Annual Conference in Madrid in June 2023. ULI is also planning to develop a tool to help apply the analysis. For more information, contact [andrea.carpenter@uli.org](mailto:andrea.carpenter@uli.org)

While these industry guidelines are a great first step to break the value deadlock and increase decarbonisation efforts in this sector, there are a number of key supportive activities recommended, so that the take-up and adoption by all stakeholders can be accelerated.

These activities have been termed “levers for change”:

- **Reducing friction with an automated tool:** While the guidelines can support owners and managers to develop new practices, the modelling of all the identified transition risks can be considered complex and multifaceted. A smart tool which takes the form of an industry standard discounted cash flow that can aggregate the disparate data sources and automatically support the assessment of the

financial materiality of these risks, can reduce friction and speed up the adoption. A parallel example of such a tool is the Carbon Risk Real Estate Monitor (CRREM), which has managed to become industry standard practice in Europe within a short amount of time. The development and maintenance of such a smart tool is a planned next step of the C Change initiative.

- **Closing data loops:** The guidelines for transition risk assessment suggest the need for direct disclosure of transition risks between (i) transacting entities, and from managers and owners to (ii) valuation service providers and (iii) institutional investors. The sharing of some of the information, which is necessary for precise value estimations, may not happen without a close look at compliance barriers, and the development of enabling solutions such as secure closed networks and data sharing protocols.
- **Levelling the playing field:** The role of carbon pricing in investment decision-making is not to be understated, but the industry has not made in-roads on this issue. Disclosure templates will enable more aligned comparisons, but to preserve the built environment's assets, there needs to be a concerted effort to mediate a common internal carbon pricing benchmark and integration approach for the real estate investment industry. The C Change programme is exploring further development in this area during 2023. For more information, see *C Change Intervention #9 Carbon pricing*.

Finally, the above levers for change stand on a critical foundation, namely the coordination of industry leadership to assume early adopter position and drive industry-wide progress forward. Initiatives such as data sharing and carbon pricing agreements will not occur without a critical mass of players which drive progress forward. The C Change programme is planning to facilitate a real estate investment industry leadership group to stimulate implementation and leverage value chain influence.

## How to get involved

The consultation period for the *Transition Risk Assessment Guidelines for Consultation* has finished. The proposal can be viewed [here](#). The final version will be released in June.

For more information, please contact [andrea.carpenter@uli.org](mailto:andrea.carpenter@uli.org)

## About C Change

C Change is a ULI-led programme to mobilise the European real estate industry to decarbonise. We're a movement empowering everyone to work together for a sustainable future. We connect the brightest minds from across the value chain. We challenge barriers, share expertise, and champion innovation to move swiftly to accelerate solutions that will transform our industry and protect our planet. C Change means real change.

C Change was formed in late 2021 by a group of leading real estate players that was united in its aim to focus on collaboration to ensure companies large and small have access to practical solutions and education on decarbonisation.

## About these intervention briefings

This is one of a suite of intervention points developed as part of the C Change programme. Intervention points are specific places within a system where we can target action, interrupting business as usual to drive transformation. Of course, systems are dynamic environments that are always in flux. We expect movement over time, and will update this document as prevailing and anticipated trends change shape. This briefing was researched in 2022 and published in 2023.

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- 1 [Tracking progress | Globalabc](#)
  - 2 [McKinsey: Call for action: Seizing the decarbonization opportunity in construction](#)
  - 3 [In focus: Energy efficiency in buildings | European Commission](#)
  - 4 [Ban on office buildings that are not energy efficient | Business.gov.nl](#)
  - 5 [Energy performance of buildings directive](#)
  - 6 [Minimum Energy Efficiency Standards: Impact on UK property management](#)
  - 7 [Companies taking action - Science Based Targets](#)
  - 8 ULI Europe is at the start of a Tenant Action Plan programme. For more information on this, please contact [andrea.carpenter@uli.org](mailto:andrea.carpenter@uli.org)
  - 9 P. 4, Chart 6. [The renovation race to net-zero, Oxford Economics](#)
  - 10 [Green neighbourhoods as a service](#)
  - 11 [RICS: Climate-related stranded assets in real estate part 1: Driving change and de-risking real estate](#)
  - 12 [Transition Risk Report | GRESB](#)
  - 11 [Transition Risk Assessment Guidelines for Consultation](#)
  - 12 [Breaking the Value Deadlock: Enabling Action on Decarbonisation](#)
  - 13 For more information on embodied carbon, please see *C Change Intervention #6 Whole life carbon data*
  - 14 P. 7 [Breaking the Value Deadlock: Enabling Action on Decarbonisation](#)
  - 15 [Breaking the Value Deadlock: Enabling Action on Decarbonisation](#)
  - 16 [Industry body warns on property sector's failure to cut emissions | Financial Times](#)
  - 17 [Decarbonizing real estate: How to price the net zero transition to avoid a 'carbon bubble'](#)

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